

REMARKS

Applicants appreciate the thorough review of the present application as reflected in the Official Action mailed November 23, 2004. Applicants have amended the specification to provide the serial numbers of the related applications. Applicants submit that the claims are patentable over the cited references for the reasons discussed below.

The Information Disclosure Statements

Applicants wish to bring to the Examiner's attention an Information Disclosure Statement (IDS) that is being filed concurrently with the present Amendment. Applicants request that the Examiner return an initialed copy of the PTO-1449 form submitted with this IDS.

The Double Patenting Rejection

Claims 1-23 stand provisionally rejected under the judicially created doctrine of double patenting. Applicants will submit a Terminal Disclaimer in the present case should the cited application issue as a patent.

The Obviousness Rejections

Claims 1-23 stand rejected under 35 U.S.C. § 103 as obvious in light of United States Patent No. 6,609,213 to Nguyen *et al.* (hereinafter "Nguyen") and IBM SG24-530-9-00 to Martin Murhammer *et al.* (hereinafter "Martin"). Official Action, p. 4. In rejecting Claims 1-23, the Official Action acknowledges that Nguyen does not disclose network security processing but relies on Martin as providing the teachings missing from Nguyen. Official Action, p. 5.

To establish a *prima facie* case of obviousness, the prior art reference or references when combined must teach or suggest *all* the recitations of the claims, and there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. See M.P.E.P. § 2143. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. See M.P.E.P. § 2143.01(citing *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990)). As emphasized by the Court of Appeals for the Federal

Circuit, to support combining references, evidence of a suggestion, teaching, or motivation to combine must be clear and particular, and this requirement for clear and particular evidence is not met by broad and conclusory statements about the teachings of references. *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). In another decision, the Court of Appeals for the Federal Circuit has stated that, to support combining or modifying references, there must be particular evidence from the prior art as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. *In re Kotzab*, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000).

Furthermore, as stated by the Federal Circuit with regard to the selection and combination of references:

This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983). Thus the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion....

In re Sang Su Lee, 277 F.3d 1338, 1343 (Fed. Cir. 2002). As discussed in further detail below, Applicants submit that the Official Action has failed to establish a prima facie case of obviousness as the cited references do not disclose or suggest each of the recitations of the claims and a proper motivation to combine the references in the manner cited in the claims has not been established.

Turning to the specifics of the rejections, Claim 1 recites as follows:

1. (Original) A method of transferring network security based communications from a first distribution processor, which provides secure communications over a network in a distributed workload environment having target hosts which are accessed through the first distribution processor by a common network address, to a second distribution processor, the method comprising:
providing information sufficient to restart the transferred network security based communications at the second distribution processor;
detecting takeover of the common address by the second distribution processor;
terminating existing network security based communications to the first distribution processor;

restarting the transferred network security based communications at the second distribution processor utilizing the provided information;
routing both inbound and outbound network security based communications with target hosts utilizing the common network address through the second distribution processor; and
network security processing both the inbound and the outbound network security based communications utilizing the common network address at the second distribution processor.

Analogous system and computer program product recitations are found in independent Claims 20 and 22, respectively. Applicants note that Claim 1 relates to the transfer of active network security based communications that utilize a common network address to access target hosts between a first distribution processor and a second distribution processor. Thus, Claim 1 recites, for example, "detecting takeover of the common address," "terminating existing network security based communications" and "restarting the transferred network security based communications." Furthermore, it is clear that Claim 1 relates to distribution processors as Claim 1 expressly recites "routing ... communications with target hosts ... through the second distribution processor." (emphasis added).

In contrast to the transfer of active connections between distribution processors, the cited portions of Nguyen appear to relate to providing a backup server for a failing server using conventional IP communications. *See* Nguyen, Abstract. Nguyen does not appear to have a need for restarting communications or otherwise maintaining any information about communications as Nguyen appears to relate to communications that are atomic in nature. For example, there does not appear to be any discussion of the new server responding to communications that were received by the failed server and not responded to by the failed server. Nguyen appears to only relate to routing new requests to a backup cluster if a primary server fails. In fact, the cited portions of Nguyen do not appear to disclose or suggest more than is described in the Background of the present application. As such, the cited portions of Nguyen do not appear to disclose or suggest the recitations of Claim 1.

The Official Action cites to Fig. 2 of Nguyen as disclosing the recitations of Claim 1. However, Fig. 2 of Nguyen does not appear to relate to distribution processors as recited in Claim 1. Furthermore, there does not appear to be any recitations regarding "providing

information sufficient to restart transferred network security based communications at the second distribution processor." Fig. 2 of Nguyen appears to relate to a backup server assuming the IP address of a failed server. There does not appear to be any discussion in Nguyen related to blocks 34 and 36 of Fig. 2 that describes restarting communications. For example, col. 5, lines 38-58 of Nguyen appears to describe the operations associated with blocks 36 and 38 of Fig. 2 of Nguyen. These portions of Nguyen describe reassigning ownership of logical unit numbers (LUNs) in a storage area network (SAN), not information for restarting transferred communications and not information regarding restarting transferred security-based communications.

With regard to "detecting takeover of the common address by the second distribution processor," the Official Action cites to block 38 of Fig. 2 of Nguyen as disclosing these recitations. Official Action, p. 5. However, block 38 of Nguyen describes reassigning LUNs owned by a failing cluster. This is not detecting takeover of a common address by a new distribution processor but is detecting failure of an existing server. There does not appear to be any provision in the cited portions of Nguyen for moving ownership between two active clusters other than through manually reassigning the LUN ownership and IP address. *See* Nguyen, col. 6, line 65 to col. 7, line 9. As such, Nguyen has no need to detect that an address has been taken over from a previous distribution processor as the reassignment of the address is performed by a system administrator.

Claim 1 further recites "terminating existing network security based communications to the first distribution processor." The Official Action does not appear to cite to any portion of Nguyen as disclosing these recitations of Claim 1. Official Action, p. 5. While Nguyen does describe reassigning an IP address to a new cluster with reference to block 40 of Fig. 2, there does not appear to be any discussion of terminating existing communications.

The Official Action cites to block 40 of Fig. 2 of Nguyen as disclosing "restarting the transferred network security based communications at the second distribution processor utilizing the provided information." Official Action, p. 5. However, as discussed above, this portion of Nguyen does not describe restarting transferred communications but merely describes reassigning an IP address so subsequent requests are sent to the backup cluster. *See* Nguyen, col. 6, lines 21-49.

The Official Action cites to block 42 of Fig. 2 of Nguyen as disclosing routing both inbound and outbound network communications with target hosts utilizing the common network address through the second distribution processor and processing both the inbound and the outbound network security based communications utilizing the common network address at the second distribution processor. Official Action, p. 5. However, as discussed above, Applicants submit that Nguyen does not describe distribution processors but describes the backup for a server failure. Thus, while Nguyen does describe the transfer of an IP address from a failing server to a backup cluster, there does not appear to be any discussion of routing communications using a common network address or security processing any communications as is recited in Claim 1.

In light of the above discussion, Applicants submit that Nguyen fails to disclose the recitations of Claim 1 for which it is cited and, therefore, the rejections of the independent claims should be withdrawn for at least these reasons. Applicants also submit that the Official Action has failed to establish that the combination of Nguyen and Martin would result in the recitations of Claim 1 or that one of skill in the art would be motivated to combine Nguyen and Martin to result in the recitations of Claim 1. In particular, there is no suggestion in Nguyen that secure communications may be moved or otherwise handled in the event of failure. The Official Action asserts that col. 4, lines 20-30 of Nguyen suggests the use of other network protocols. Official Action, p. 5. However, there is no mention of security processing or the use of secure network protocols in the cited portion of Nguyen. As such, Applicants submit that Nguyen provides no motivation for the relied on combination with Martin. Furthermore, it is unclear how the security system of Martin could be implemented in the failure situation of Nguyen.

Furthermore, the reasons given for combining Nguyen and Martin at pages 5 and 6 of the Official Action are the type of conclusory assertions that the Federal Circuit has rejected as providing a proper basis for an obviousness rejection. Merely because a virtual private network could benefit from failure recovery does not provide a basis for combining Nguyen and Martin to result in the specific recitations of Claim 1.

In light of the above discussion, Applicants submit that Claim 1 and corresponding Claims 20 and 22 are patentable over the cited references for at least these reasons. Applicants also submit that Claims 2-10 are patentable at least as depending from a patentable base claim.

With regard to independent Claims 11, 21 and 23, Applicants submit that these claims are patentable over the cited references for reasons analogous to those discussed above with reference to Claim 1. Applicants also submit that these claims are further patentable over the cited references for the additional reasons discussed below.

In particular, neither Nguyen nor Martin describe a routing communication protocol stack as that term is used in the present application. Furthermore, in Claims 11, 21 and 23 Applicants are not claiming to have invented IPsec but to have invented a way to move secure communications between routing communication protocol stacks. Merely because IKEs, SAs and the like are known does not suggest the specific recitations of Claim 11, 21 and 23. For example, nothing in the cited portions of Nguyen or Martin at pages 5 and 6 of the Official Action discloses or suggests "deleting the IPsec SAs associated with the at least one DVIPA at the first routing communication protocol stack" and "renegotiating the IPsec SAs between the second routing communication protocol stack and remote IPsec peers utilizing the at least one DVIPA based on the IPsec information read from the coupling facility" as recited in Claims 11, 21 and 23. As such, Applicants submit that these claims and Claims 12-20 that depend from Claim 11, are also patentable over Nguyen and Martin for at least these additional reasons.

While each of the dependent claims are patentable as depending from a patentable base claim, Applicants submit that certain of the dependent claims are also separately patentable over the cited references. For example, Claim 2 recites "identifying transferred network security based communications local to the first distribution processor utilizing the common network address as distributed communications so as to cause communications utilizing the common network address and network security to be routed through the second distribution processor." Similar recitations are found in Claim 13. The Official Action cites to col. 7, lines 25-32 of Nguyen as disclosing the recitations of Claim 2. Official Action, p. 6. However, this portion of Nguyen describes the reassignment of ownership of LUN addresses and does not describe the identification of communications that are local to a distribution processor so that upon transfer of the common network address to a second distribution processor the communications can be routed through the second distribution processor back to the first distribution processor. Accordingly, Applicants submit that Claims 2 and 13 are separately patentable over Nguyen and Martin for at least these reasons.

Claim 3 recites "transmitting, from the first distribution processor to the second distribution processor prior to termination of the existing secure communications to the first distribution processor, network security information from which network security relationships associated with the transferred network security based communications through the first distribution processor can be re-established at the second distribution processor." The Official Action cites to col. 5, lines 43-58 of Nguyen as providing these recitations. Official Action, p. 6. Applicants submit that the cited portions of Nguyen do not suggest such a transmission of security information as recited in Claim 3. In fact, the cited portions of Nguyen do not describe any communications between the backup and failing servers prior to failure. Accordingly, Applicants submit that Claim 3 is separately patentable over Nguyen and Martin for at least these additional reasons.

Applicants also submit that Claims 5-8 and 14-19 are separately patentable over Nguyen and Martin as Applicants submit that the details of transferring security-based communications in these claims are neither disclosed nor suggested by the cited portions of Nguyen and Martin. Accordingly, Applicants submit that Claims 5-8 and 14-19 are separately patentable over Nguyen and Martin for at least these additional reasons.

Conclusion

In light of the above discussion, Applicants submit that Claims 1-23 are patentable over Nguyen and Martin and, therefore, request an indication of allowance of these claims. Applicants will submit a Terminal Disclaimer to overcome the provisional double patenting rejection upon an indication of allowable subject matter in the present application.

Respectfully submitted,



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